



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SUMMARY ABSTRACTS

OF THE

R E W A R D S

RESTOWED BY THE

S O C I E T Y,

From the Institution in 1754, to 1782, inclusive.

WITH

O B S E R V A T I O N S

ON THE

EFFECTS OF THOSE REWARDS,

ARRANGED UNDER THE SEVERAL CLASSES OF

AGRICULTURE, CHEMISTRY, COLONIES & TRADE,

MANUFACTURES, MECHANICKS, POLITE ARTS,

AND

MISCELLANEOUS ARTICLES.

A

SUMMARY ABSTRACT

OF THE

R E W A R D S

GIVEN IN THE CLASS OF

A G R I C U L T U R E.

	Pecuniary		Honorary	
	£.	s.	Gold	Silv.
For the encouragement of planting to raise Timber Trees, viz. Acorns, Oaks, Alder, Ash, Chesnut, Elm, Poplar, Larch, Plane Tree, Willow, and Fir Timber..	50		45	14
For Machines of a new construction, to be used in Husbandry, viz. for slicing Turneps, Ploughs, Drills, Horse-hoes, Ox-yokes, &c. besides some others, to be found in the Class of Me- chanicks	397	17	6	2
A 2				For

	Pecuniary		Honorary Medals.	
	£.	s.	Gold	Silv.
For improved modes of cultivating several species of Wheat, Barley, and cu- ring rust therein, &c. }	103	3	4	4
For cultivating several species of Grasses, viz. Bur- net, Dutch White Clover, Lucerne, &c. }	464	17	4	
For planting, cultivating, } and curing Madder }	1516	13	2	
For improved modes of feeding and rearing Cattle and Poultry, together with the culture of Cabbage, Carrots, Parsneps, Potatoes, Turneps, &c. }	161	16	8	6
For managing Bees for the increase of Honey and Wax }	145		4	3
For raising Hemp in Great Britain }	420			

For

(5)

	Pecuniary		Honorary	
	£.	s.	Medals. Gold.	Silv.
For raising and curing } Rhubarb			3	2
For a method of destroy- } ing the Red Spider in Gar- } dens and Hot-houses, &c.	22	2		
For improving Waste } Land			1	
	£3281 8		77	31

(6)

OBSERVATIONS
ON THE
EFFECTS OF REWARDS
BESTOWED IN THE CLASS OF
A G R I C U L T U R E .

TIMBER.

THE national benefits to be derived from improvements in Agriculture, made it an early object of the attention of the Society : it engaged them to extend their premiums and bounties largely to candidates in this class ; and the several articles for which they have been given, point out, in a great measure, their utility. The raising, planting, and preserving Trees proper for Timber, particularly Oak, in a commercial and maritime kingdom, where it is so much in demand, have been greatly promoted by the premiums they have offered ; and the effects may, in some degree, be observed, from the quantities for which the successful candidates

(7)

dates have obtained them, though no account has been taken of the quantities raised or planted by the unsuccessful ones.

H E M P.

Hemp being an article essential to our shipping, and of the highest importance to us as a maritime and commercial people, the culture of that plant has been carefully attended to, and the practicability of growing it to advantage in Great Britain, clearly demonstrated ; a matter which, if ever we should be engaged in war against those nations by whom that article has been hitherto supplied, will hereafter prove of singular benefit to this country.

G R A I N.

Improvements in the culture of most kinds of Corn and Grass Seeds have been diligently searched for, and in many articles happily found.

Very considerable improvements in several of the common utensils of Husbandry,

dry, and others entirely of a new construction, have not only been obtained, but their utility experimentally proved by the Society ; and many of these, in large, and the models of others, have been placed in their repository, for the inspection and use of the publick.

FOOD FOR CATTLE.

The discovery of a Food for Cattle and Sheep during the spring months, has ever been considered as a subject of the first importance in Agriculture ; the Society therefore began at an early period to turn their attention towards it, and, in hopes of obtaining so desirable an object, many rewards were bestowed for the culture of such plants as make an early appearance, as Burnet, Lucerne, &c. At length the wishes of the Society were in a great degree gratified, by some accounts received of the use of the Turnep-rooted Cabbage, or, as it is sometimes called, Reynolds's Turnep, from its having been first cultivated

ted for these purposes by the late Mr. John Reynolds, of Adisham, in Kent, who was rewarded by the Society for the discovery, and whose papers on this head have been already printed. Yet the culture of this valuable vegetable was long confined to Kent, and a few adjoining counties; but it will be found, by the letters of Mr. Tugwell and Mr. Robins, published in this volume, that the cultivation of the Turnep-rooted Cabbage has now spread itself into Gloucestershire: of what great utility it will prove to the farmers in that county, is easy to determine; and as the knowledge of the uses of so valuable a plant will now be known to the whole kingdom, there is every reason to believe its culture will extend, and the benefits resulting from it be universally felt.

M A D D E R.

Madder, an essential article in dyeing and calico-printing, which had been raised to an extravagant price by the foreign growers

ers and importers, on a supposition that it could not be brought to any degree of perfection in this kingdom, has been very successfully obtained by the considerable premiums given for that purpose; and the English Madder produced in consequence was found as good, at least, if not better than any imported.

As the culture of this article is attended with great expense, the Society was apprehensive that the payment of tithes in kind might counteract the good effects otherwise to be expected from their premiums: some of their members, who had seats in parliament, applied to the legislature, and obtained an act, by which the payment of tithes for Madder was fixed at five shillings per acre.

By the removal of this obstacle, and a continuation of Rewards from the Society, the effect principally required has been fully obtained : foreign madder is reduced to a reasonable price, and likely to continue

tinue so, as the growers in Holland, and other countries from whence it is imported, are thoroughly convinced that we can supply ourselves with any quantity, and of the best kind, whenever, by an advance of the price, the profits are found sufficient to engage the attention of our husbandmen. Our dyers and calico-printers have been greatly benefited, and the nation has saved many thousand pounds by the reduction of the price of this article.

A SUM-

(12)

A

SUMMARY ABSTRACT

OF THE

R E W A R D S

GIVEN IN THE CLASS OF

C H E M I S T R Y.

	Pecuniary		Honorary	
	£.	s.	Medals. Gold.	Silv.
For improvements in } Dyeing and Tanning, Train } Oil, &c.	50		2	1
For making Crucibles, } Retorts, and importing } Black Lead for making } Melting Pots.....	211			
For Sal Ammoniac, Ver- } digris, and Substitutes for } Borax and Verdigris.....	211	10	1	
For making Enamel, } Glass for Achromatic Te- } lescopes, Glass for Glazing } Prints, and Varnish.....	166	5		

For

	Pecuniary		Honorary Medals.	
	£.	s.	Gold	Silv
For discovering Cobalt, making Zaffre and Smalt, improving British Iron, Tinning with pure Tin, White Copper, and Leaf Metal and Bronze.....	174		1	1
For cleansing Carvings in Ivory, improving the Di- gestor, securing the health of Water Gilders, and mak- ing Slow Match	78	15		
	£1391	10	3	3

OBSERVA-

OBSERVATIONS
ON THE
EFFECTS OF REWARDS
BESTOWED IN THE CLASS OF
CHEMISTRY, DYEING, AND
MINERALOGY.

COBALT.

THE discovery in these kingdoms of the mineral substance called Cobalt, from which Zaffre and Smalt are prepared, was a very early object of the attention of this Society : and though their expectations, that a mine of it would have been worked, have not been gratified ; yet, by the several premiums offered and bestowed, in order to promote that design, this good effect has followed, that a mine has been discovered, though not worked, and that the miners, assayers, and chemists of this country are become much better acquainted with the nature of Cobalt, and the

the manner of preparing Zaffre and Smalt from it, than they were before. And as it is well known that there are other mines, or, at least, some veins of this substance, in Cornwall, Devonshire, and also in Scotland, and probably in other parts of the kingdom, it promises, in time, to become a matter of very great and profitable importance. For, when it is considered that all the Cobalt used in our manufactories, and nearly all the Zaffre and Smalt consumed here, are imported at a large expense from abroad, the discovery of the original material, and making the preparations from it, will open a new business, and establish a manufacture which has hitherto taken place here only on a small scale. Great quantities of Smalt imported, as has been observed, from abroad, are used under the name of Powder Blue, in washing linen; and very large quantities of Zaffre are annually sent to China, for the use of their manufacturers. Much of the Zaffre brought to England is
mixed

mixed with matters that debase its quality and injure its colours ; and as the manner of preparing it from Cobalt is now well known in England, and as all mixture of foreign matter may be easily avoided, there is not a doubt, that if a mine of Cobalt should be properly worked in this kingdom, that material, so useful in our manufactures, and of so much consequence as an article of commerce, may be prepared here in a more accurate manner than has hitherto been practised abroad.

CRUCIBLES AND RETORTS.

As all Crucibles and earthen Retorts used by chemists, assayers, and melters of metals, were imported from abroad, the Society thought the discovery of proper materials for manufacturing them in this country, was an object well worthy of consideration ; and having bestowed some few rewards for that purpose, were pleased to find that a manufactory for making these
vessels

vessels was established at Chelsea ; where they are not only made for home consumption, but considerable quantities have been exported. It may be here observed, that those kind of Crucibles or Melting Pots, called Black Lead, or Blue Pots, which are the only sorts made use of in Cornwall for assaying Tin Ores, were not to be obtained from any part of Europe, except a small place called Hafners Zal (i.e. Potters Place) or Passou, near Rehgensburg in Germany, where the only manufactures of this kind were carried on. This inconvenience laid the tin smelters in Cornwall very frequently under great difficulties, not only with regard to the advanced price in time of war, but, for want of an importation of the pots, a stop has often been put to many of their works.

The Society have the satisfaction to find, by certificates from some of the most respectable assay-masters in Cornwall, that, in consequence of their attention and Rewards, a manufacture of pots, fully answering all their purposes, is now established

B

at

at Chelsea; and many of the principal refiners, and the workmen at the mint, using no other than what are made there, the most sanguine wish the Society had, on this important object, has been fully gratified.

TANNING WITH OAK SAWDUST.

The reward given by the Society to the person who discovered the use of Oak Sawdust in the Tanning of Leather, (of which full trial was made, and the efficacy thereof ascertained, as appears by the samples in the Society's repository) threw new lights on that very extensive and useful manufacture; and the improvements made in consequence thereof will probably, in time, be practised to great advantage, when the legislature shall think proper to repeal that law which confines the tanner to the use of very few materials in his business.

DYEING or COLOURING LEATHER.

The introduction of the eastern manner of dyeing Red and Yellow Leather has been attended

attended with great advantages to the publick; a manufacture of considerable extent being now established in England, where these kinds of leather are prepared and dyed in a manner superior to what are imported from Lisbon or elsewhere, and of which large quantities have been exported to foreign markets.

DYEING TURKEY RED.

The art of dyeing this colour on cotton, was formerly unknown in these kingdoms; but, by the attention of manufacturers to the premiums offered for the discovery of it, it can now be done here of as beautiful and lasting a colour as that imported from the Levant.

SAL AMMONIAC.

The making of this Salt in England has succeeded so far, that very large works of it are now carried on; to the attainment of which, there is good reason to believe, the premiums offered, and the bounties

B 2

given

given, by the Society, have in a great measure contributed. And if it be considered, that great quantities of this material are consumed in various operations, the whole of which was formerly imported, its attainment will be found to be an object of great consequence.

VARNISH.

The beauty and durability of the Varnish invented and used by Mons. Martin, of Paris, and for which large sums of money were annually sent out of these kingdoms, induced the Society to offer premiums for discovering the method of making the like here ; and the high perfection to which our workmen are now arrived in that art evinces, that those premiums have had a happy effect.

VERDIGRIS.

This article, of great use to Dyers, and some other Manufacturers, was formerly wholly imported from France, at a very
great

great expense; but the Society having reason to believe that Verdigris might be made in England at a reasonable price, several premiums were paid for attempts to obtain it; and, of late years, a work has been established, where it is manufactured in very considerable quantities; but as an ingenious person at Manchester has discovered a method of preparing a cheap substitute, which, on repeated trials, has been found fully to answer the purposes for which Verdigris is used in dyeing, a reward was given to him for disclosing the secret; and the whole process, drawn up by himself, is annexed to the article of Chemistry, published in this volume.

A
SUMMARY ABSTRACT
 OF THE
R E W A R D S
 GIVEN IN THE CLASS OF
COLONIES AND TRADE.

	Pecuniary		Honorary	
	£.	s. d.	Medals. Gold	Silver
For establishing a Botanick Garden, and for observations applied to use in Georgia.....			2	
For importing Earth Nuts, Myrtle Wax, Sturgeon, and Zebra Wood..	175		5	
For making Indigo, Iron, and Saltpetre....	50		5	
For planting Vines and Mulberry Trees, and producing Silk and Cotton..	1665	18 2	3	
For establishing manufactures of Pot-ash and Pearl-ash.....	894	15 6	1	
	£2785 18 8		14	

OBSERVA-

OBSERVATIONS
ON THE
EFFECTS OF REWARDS
BESTOWED IN THE CLASS OF
COLONIES AND TRADE.

THE Society, influenced by the tenor and spirit of sundry acts of parliament, subsisting for more than a century past, and being of opinion, that to encourage in the British Colonies the culture and produce of such commodities as we must otherwise import from foreign nations, would be more advantageous to the navigation and commerce of this kingdom, than if the like things could be raised within the island of Great Britain, have liberally extended their premiums and bounties for sundry articles suited to the climates and circumstances of the North-American provinces: among which, the Manufactures of Pot-ash and Pearl-ash happily succeeded to their wishes, and the

importation of these articles from North America was an established and important branch of Trade.

The planting of Mulberry Trees, the propagation of Silk Worms, and the produce of Silk, were so far advanced, that, in consequence of the rewards given by the Society, eleven thousand five hundred and seventy-five pounds of Raw Silk were imported from those provinces.

The planting of Vines, and making Wine from Grapes; the improvement in the making of indigo; and the obtaining oil from Vegetables, the produce of those colonies, have been objects of the Society's attention.

A SUM-

A
SUMMARY ABSTRACT
 OF THE
REWARDS
 GIVEN IN THE CLASS OF
MANUFACTURES.

	Pecuniary		Honorary	
	£.	s.	Medals. Gold	Silv.
For improvements in the Manufacture of Leather, in Bleaching, in making Cat- gut, in making Artificial Flowers, in Weaving Fish- ing Nets, Tapestry, and Window Blinds	209	8	1	1
For making Carpets, Chip Hats, Druggets, Cambrick, Lace, Milled Caps, and va- rious kinds of Paper	685	11		3
For Quilting in the Loom, and spinning several sorts of Yarn	597			

For

	Pecuniary		Honorary	
	£.	s.	Medals. Gold	Silv.
For improving several Machines used in Manu- factures, viz. the Comb Pot, Cards for Wool and Cotton, Stocking Frame Loom, Machines for wind- ing and doubling, and Spin- ning Wheels }	544	12		
For methods of breeding Silk Worms }	21			
	£2057 11		1	4

OBSERVA-

OBSERVATIONS
ON THE
EFFECTS OF REWARDS
BESTOWED IN THE CLASS OF
M A N U F A C T U R E S.

THE great and good effects of rewards bestowed in this class, afford the clearest proofs of the advantages which this nation has derived from the benevolent labours of the Society.

Genius, though not confined to any particular rank, often sleeps with the affluent, while necessity compels the indigent to exert it.

That noble enthusiasm, which always exists in the authors and inventors of agreeable and useful arts, is easily excited by well-timed, though moderate rewards: and, therefore, that there should be a bank of generosity, to which such genius may, without difficulty, apply, and from whom,
with

with certainty, it may expect the reward of merit, as well as a mark of honour, is here undeniably proved to be the surest means of employing and applying such genius to national benefit.

It is not our intention to insinuate, that the rewards given by the Society have been, in any degree, equal to the national advantages obtained by them : we mean only to shew what great benefits have been, and may be derived from small means well administered.

CARPETS,

MANUFACTURED IN THE TURKISH MANNER.

This was an early object of attention in the Society ; by their rewards it is now established in different parts of the kingdom, and brought to a degree of elegance and beauty which the Turkey Carpets never attained.

CAMEOS

CAMEOS AND INTAGLIOS,

IN ARTIFICIAL GEMS.

In consequence of premiums offered in the class of Polite Arts, for introducing and improving the art of imitating ancient sculptured Gems, Cameo and Intaglio, by exact impressions, in various coloured pastes, a Manufacture of this kind is established in England, and succeeds so well, that all sorts of engraved or embossed Gems, ancient or modern, can be exactly copied, and at so small an expense, that whatever there may be of taste and elegance in these epitomized compositions of the ancients, they are now no longer confined to the cabinets of the curious, but, for the benefit of young artists, and the gratification of all others, are diffused among the publick.

CHIP HATS,

Being of very general and popular use among the female part of the nation, are
con-

consequently, while they continue to be imported from abroad, an important article in the national outgoings; but now they are brought to such perfection in the Manufactories set up in Devonshire and other parts, as to give hopes that the importation will soon cease.

COMB POT.

It is of the greatest importance, that every branch of the woollen manufactory, esteemed the Staple Trade of the kingdom, should be carried on at the smallest expense.

The Combers of Wool generally heat their Combs by Charcoal, which, in parts where wood is scarce, is immoderately dear. The inventor of a Comb Pot, whereby the same operation is effectually performed by Pit Coal, was judged to be well worthy of being distinguished and rewarded by a bounty.

DRUG-

DRUGGETS.

The Society having been informed by Merchants, that a particular species of foreign Druggets were in great request in the southern markets of Europe, established and continued annual premiums, till our manufacturers made the like sort in perfection equal to the foreign.

LEATHER.

Hides being a native commodity, the converting them into Leather was attended to by the Society as another Staple Manufacture. In consequence of their rewards, Losh, or Buff Leather, has been made in England, equal to the best imported.

Also, a very extensive manufacture of Red Leather, in imitation of Turkey or Lisbon, has been established under the influence of their rewards; great improvements having been made in the process laid before the Society, by the foreigner
from

from whom they purchased the secret (see the article in class Chemistry). The skins are now prepared and dyed in so excellent a manner, that they are not only preferred to the foreign by the consumers of that commodity at home, but have been exported in considerable quantities.

SPINNING, WEAVING, &c.

Great and repeated improvements have been produced to the Society, in Spinning Wheels, and Machines for winding, doubling, and twisting Linen, Cotton, and Worsted Yarn; and also a very extraordinary improvement in the Loom itself: the general intention in all these Machines being to shorten labour, and to save expense; the Machines themselves, or perfect models of them, are preserved in the Society's repository.

It is no improbable conjecture, that the great improvements in Spinning, which have taken place within twenty years, in
these

these kingdoms, particularly in the Cotton works in Lancashire, Derbyshire, Nottinghamshire, &c. are to be assigned to the premiums offered and paid by this Society.

In the year 1760, premiums were first offered for “ the best invention of a machine for spinning six threads of Wool, Cotton, Flax, or Silk, at one time, and that will require but one person to work and attend it ;” and in 1764, some premiums were paid for attempts at obtaining that desirable object. At the time, therefore, of the first offering rewards on this subject, there seems reason to believe the thought had not occurred to the manufacturers in general ; for, from the best information hitherto obtained, it appears, that, about the year 1764, a poor man, of the name of Hargreaves, employed in the Cotton manufactory, near Blackburn, in Lancashire, first made one in that county, which spun eleven threads ; and that, in the year 1770, he obtained a patent for

the invention. The construction of this kind of Machine, called a *Spinning Jenny*, has since been much improved, and is now at so high a degree of perfection, that one woman is thereby enabled, with ease, to spin a hundred Threads of Cotton at a time; nor did the spirit and ingenuity of the manufacturers in this extensive branch stop here, for, since that period, those stupendous works, the Cotton Mills, at Crumford, in Derbyshire, and several other places, have been erected; where, by the motion of a large Water-wheel, the Cotton is carded, roved, and spun into threads, infinitely more expeditiously, and with greater truth, than can possibly be done by hand, and better adapted to the general purposes of the manufacturers.

Of how great advantage these contrivances have been to the trade of Manchester, and the country many miles round it, and, by laying the foundation of a very extended commerce, to the kingdom in general,

general, is so well known, as to render a farther detail unnecessary.

PAPER.

1. Of Silk Rags. 2. For Copperplate Printers. 3. Embossed. 4. Marbled.

Under the encouragement of the Society, all these have been established or promoted; the first, from the difficulty of discharging the colours from dyed silk, has not been yet made perfectly white; but is manufactured in small quantities of different shades of brown, or other colours, and is the best paper for drawing on with chalks, or crayons. The second was necessarily imported, at a considerable expense, from France, till its manufacture at home was promoted by the Society: the third and fourth sorts were also foreign manufactures; and the last, being of very general use, was imported in great quantities, and to a great amount in value; but it is now made here to perfection, at

several manufactories, and is become an article of exportation.

QUILTING IN THE LOOM.

When the proposition was first made in the Society, of offering a premium to encourage the making in the Loom, an imitation of that species of Needle-work, long known by the name of Marseilles Quilting, it was almost rejected as visionary and impossible ; but the laudable spirit of enterprise, which has always distinguished this Society, determined them to publish the premium, and the consequence has justified the measure. This success animated them to continue their premiums, in hopes of farther improvement, in which they were not disappointed. The manufacture is now so thoroughly established, and so extensive, being wrought in all the different materials of Linen, Woollen, Cotton, and Silk, that there are few persons of any rank, condition,

tion, or sex, in the kingdom, (and we may add, within the extent of British commerce, so greatly is it exported) who do not use it in some part of their clothing; so that we may safely say, if the whole fund and revenue of the Society had been given to obtain this one article of Trade, the national gain, in return, should be considered as very cheaply purchased.

A
SUMMARY ABSTRACT
 OF THE
R E W A R D S
 GIVEN IN THE CLASS OF
M E C H A N I C S.

	Pecuniary		Honorary Medals.	
	£.	s.	Gold.	Silv.
For improvements in different kinds of Carriages; for a Coach-brace, and for a variety of Machines and Models	807	1	2	4
For an Auger, Gauging-rod, Index-balance, Quadrant, Hydrometer, Locks, Hinges, Wimble, and Jack for Ship Builders	168	10	1	3
For Mills, viz. Hand-mills, Saw-mills, Tide-mills, &c. Pumps, Chime Clock, Time-Piece, Ships Blocks, Valve Water Cock, Cranks and Packing Presses	807	15	1	1

For

For a Model of an Arch, Cranes, Engine for polish- ing Plate Glass, Gun Har- poons, utility of Gun Har- poons, Ploughs, Pulleys, Silk Reel, Springs, Tablets, Spinning Wheels, Umbrel- la, Compass, Diving Bell, Floating Light, Irons for Wire-drawing, and Port- able Oven	Pecuniary		Honorary	
	£	s. d.	Gold	Silv.
	617	8 6	4	5

For discovering an uni- versal Standard of Weights and Measures, Account of the Archimedean Screw, and a method of Measuring Distances, &c.	Pecuniary		Honorary	
	£	s. d.	Gold	Silv.
	52	10		1

For the method of Float- ing Vessels stranded on a lee shore, exemplified by a model of the York East- Indiaman, in the Society's Repository	Pecuniary		Honorary	
	£	s. d.	Gold	Silv.
			1	

£2453 4 6 9 14

OBSERVATIONS
ON THE
EFFECTS OF REWARDS
BESTOWED IN THE CLASS OF
MECHANICKS.

ONE great and general effect of the rewards given in this class, has been the removing, in many instances, old vulgar prejudices against all new inventions. The most ignorant are generally the most obstinately attached to the ways of working wherein they have been brought up. The husbandmen of Surrey, Berkshire, and sundry other parts, can scarcely be prevailed upon, at this day, to use the Norfolk and Suffolk Plough in similar soils, though it operates at half the expense of their own. But the many valuable Machines and Models, the Mechanical Inventions or Improvements produced in near thirty years (and every year increasing) being preserved in the Society's repository,
for

for the inspection and information of the publick, and the several convincing experiments made under the auspices of the Society, have begun, by means of its members, and other gentlemen, to excite and diffuse a spirit of improvement, particularly in instruments of husbandry, through all parts of the kingdom.

SAW-MILLS.

Intimidated by a groundless suggestion of a pretended prohibitory act of parliament, this country submitted, for many years, to have Timber cut into Boards by the Saw-mills of Holland and other foreign Countries, till the publick spirit, and the rewards of the Society, interposing, the prejudice was overcome; and, to the great credit and emolument both of the publick and of the particular undertakers, Saw-mills are now firmly established in England.

WHALE

WHALE FISHERY

The invention of the method of Striking Whales by the Gun-harpoon, now confirmed by experience, will, most probably, make the profits of that Fishery much more considerable than they were before.

PLANING CAST IRON—POLISHING PLATE GLASS.

The Machine for Planing Cast-Iron Plates; and also the Engine, or Mill, for Polishing Plate Glass, by horse, wind, or water, are inventions of very great merit. But it suits not the intended brevity of these observations, to describe the several excellent Machines in possession of the Society, which will be best understood by viewing them in the Repository.

WEIGHTS AND MEASURES.

The discovery of an universal Standard of Weights and Measures has long been
wished

wished for by the learned in every part of Europe ; and the Society, in hopes of obtaining so desirable an object, offered considerable premiums, which extended to persons residing in any country whatever. To the honour of this nation, a mode has been found of lengthening and shortening a pendulum by so easy a method, and with such degree of accuracy, as to solve the problem in a manner nearer truth than had ever been done before, and renders it probable, that, with some improvements, it may become perfect ; but as an abstract of the paper, to which a part of the premium was adjudged, is annexed to this article, and a model of the Machine remains in the Society's Repository, it is unnecessary to be more particular on this subject.

A SUM-

(44)

A

SUMMARY ABSTRACT

OF THE

R E W A R D S

GIVEN IN THE CLASS OF

P O L I T E A R T S.

	Pecuniary		Honorary Medals.		Pallets.	
	£.	s.	Gold	Silver	Gold	Silver
For Basso Relievos, Casting in Bronze, Carvings in Wood, Statues in Marble, Cameos, Pastes, and Profile of his Majesty.....	1547	3			1	
For Charts, Maps, Survey and Plans	356	10	1	1		
For Drawings, Etchings, Engravings, and Mezzotintos	3591	19	22	25	20	64
For Painting, viz. History Painting, Landscape Painting, and Sea Pieces, and for Modeling	3015	18			2	3

For

For improvements in Crayons, Water Colours, Ink, Staining Marble, Machine for teaching blind persons Arithmetick, Needle- work, and Penmanship	Pecuniary	Honorary Medals.		Pallets.			
	£.	s.	Gold.	Silver.			
	84			1	1		
	£8595	10	23	26	23	68	53

OBSERVA-

OBSERVATIONS
ON THE
EFFECTS OF REWARDS
BESTOWED IN THE CLASS OF
POLITE ARTS.

HOWEVER considerable the sums that have been expended by the Society in the advancement of the Polite Arts, the remarkable success with which they have been attended, may now be contemplated with particular satisfaction. It soon became evident, from the number of candidates for premiums in the several branches of this Class, that genius wanted only encouragement, to shine with equal lustre in this as in other countries; and it appears, that the rewards so liberally distributed by the Society, have been the means of bringing forward a number of ingenious artists, and inciting individuals to such an exertion of their talents, as to become

become an honour to the Society, and to their country.

The reputation acquired by several candidates, in consequence of their performances remaining for some time under the inspection and examination of the members of the Society, before and after adjudication, occasioned the artists in general to apply for an exhibition of their works, in the Society's great room, which was accordingly complied with, and repeated annually for some years at the charge of the Society.

Hence arose the annual exhibitions of the rival artists, who formed themselves into separate bodies. The emulation by which each was excited, helped greatly to promote the rapid improvement of the arts, and to attract the general attention of the publick towards their performances. And hence, also, the royal patronage and protection they have since had the honour of obtaining, and under which they so eminently

eminently and deservedly flourish, may in some measure be derived.

The Society having been thus fortunately successful in rearing the infant arts in this kingdom, to such maturity as qualified them for royal favour, have, for some years past, confined their premiums chiefly to the encouragement of those youths who may intend to be professors of the arts ; but, still to diffuse an elegant taste among those in a higher sphere of life, honorary premiums are annually bestowed on young persons of rank and eminence, who may probably become, hereafter, the patrons or patronesses of the fine arts : and it is with the highest degree of satisfaction the Society observe the accuracy and beauty of the productions which are offered in claim of those premiums.

Encouragement has also been given to those branches of the Polite Arts, which more immediately tend to improving the Manufactures, and consequently promot-
ing

ing the commerce of the country, such as Silk Weavers, Calico Printers, &c. &c. and the elegance of pattern adopted by them, and which renders their Manufactures equal in beauty to those of any other country, may, with justice, be attributed, in a great degree, to the rewards and attention bestowed on them by the Society.

MISCELLANEOUS ARTICLES,

NOT ARRANGEABLE IN THE FOREGOING CLASSES.

<i>Date.</i>	<i>Article.</i>	<i>To whom adjudged.</i>	<i>Pecuniary.</i>		<i>Honorary Medals.</i>
			£.	s. d.	
1756	For a Plan for the management of a Parish Workhouse	Mr. William Bailey..	50		
1758	For eminent services {	Jacob Lord Viscount Folkstone, President }			1
	For eminent services {	Robert Lord Romney, Vice-President }			1
For					

<i>Date.</i>	<i>Article.</i>	<i>To whom adjudged.</i>	<i>Pecuniary.</i>		<i>Honorary Medals.</i>	
			<i>£.</i>	<i>s. d.</i>	<i>Gold</i>	<i>Silver</i>
1758	For his public spirit, } which gave rise to the } Society }	Mr. William Shipley			1	
	For designing the Ho- } norary Medal of the So- } ciety }	Mr. James Stuart			1	
1761	For procuring Fish by } Land Carriage }	John Blake, Esq.	3500			
1763	For procuring Fish by } Land Carriage }	John Blake, Esq.			1	
1767	For eminent services {	Edward Hooper, Esq. } Vice-President }			1	
					For	

<i>Date.</i>	<i>Article.</i>	<i>To whom adjudged.</i>	<i>Pecuniary.</i>		<i>Honorary Medals.</i>	
			£.	s. d.	Gold	Silver.
1767	For an Essay on Pot Ashes	Dr. William Lewis			1	
1768	For an Essay on Pot Ashes	Robert Dossie, Esq. . .			1	
	For eminent services	George Eckersal, Esq.			1	
1769	For a list and description of Machines	Mr. William Bailey . .	52	10		
1770	For eminent services . . {	Sir Charles Whitworth, Knight }			1	
	For eminent services . .	Will. Fitzherbert, Esq.			1	
	For many and great services	Matthew Duane, Esq.			1	
						For

<i>Date.</i>	<i>Article.</i>	<i>To whom adjudged.</i>	<i>Pecuniary.</i>		<i>Honorary Medals.</i>	
			£.	s. d.	Gold.	Silver.
1770	For repeated services . . . { For exhibiting Models of Machines of his inven- tion, and in consideration of his expences in attend- ing the Society }	Rodolph Valtravers, } Esq. }			1	
1772 to 1773	Advanced to diminish the annual rent of the pre- mises occupied by the So- ciety }	Mr. Gregson Messrs. Adam }	10	10		
1775	For essential services . .	John Phillips, Esq. . .			1	

For

<i>Date.</i>	<i>Article.</i>	<i>To whom adjudged.</i>	<i>Pecuniary.</i>	<i>Honorary Medals.</i>
1775	For promoting the views } of the Society.....}	Isaac Jamineau, Esq.		Gold Silv. 1
	For promoting the views } of the Society.....}	Lord Le Despencer ..		1
	For repeated services ..	Valentine Green, Esq.		1
1778	For presenting two sta- } tues of Mars and Venus..}	John Bacon, Esq.....		1

<i>Date.</i>	<i>Article.</i>	<i>Pecuniary.</i>		<i>Honorary Medals.</i>	
		<i>£.</i>	<i>s. d.</i>	<i>Gold.</i>	<i>Silver.</i>
	ON ACCOUNT OF THE PAINTINGS IN THE GREAT ROOM OF THE SOCIETY.				
1777	For Canvas, Colours, and Models	150	19 10		
to	For the Frame and other incidental expenses } attending their fitting up	156	10 4		
1783	Presented to Mr. Barry				
		357	10 2		
	From the preceding pages	5783		18	
	Total	6140	10 2	18	

OBSERVATIONS
ON THE
MISCELLANEOUS ARTICLES.

BESIDES the premiums and bounties distributed on account of the several articles ranged under the foregoing classes, the approbation of particular services rendered to the Society, has likewise been occasionally testified by the grateful acknowledgment of an honorary gold medal ; and, in some signal instances, where no return in their power could be deemed adequate to the obligation conferred, the Society have endeavoured to stamp a yet more specifick value, by the addition of some express testimonial engraved accordingly on the medal, and have also occasionally thought proper to extend their encouragement, in behalf of the publick, to some particular objects, not altogether, perhaps,

perhaps, so strictly within the ordinary prescribed limits of their original design.

That which may be accounted the chief deviation from their general plan, was the very large sum given for an endeavour to establish an effectual method of procuring a constant supply of Fish, from several of our distant coasts to the capital, by land-carriage ; in which they had the concurrence of the legislature, who not only granted a sum of two thousand pounds for the same purpose, but also passed an act, by which the legal obstructions to the execution then subsisting were entirely removed. This plan, though it has not, in every degree, answered the sanguine expectations of the Society and the publick, yet must be universally allowed to have been productive of great good, not only to the cities of London and Westminster, but to the country in general ; fish, since the establishment of the Land Carriage Plan, being brought by that mode of convey-

conveyance, in great abundance and variety, to the metropolis, and to most of the capital towns in the kingdom, and the inhabitants thereby furnished with a delicious and wholesome food they were formerly in a great degree unacquainted with.

Another benefit arose to the publick, from instituting a mode of bringing fish to London by Land Carriage, which, as it does not, at first sight, appear connected with that scheme, has been generally overlooked in the consideration of the business. The benefit here alluded to is the improvement of carriages ; as fish was very liable to be injured by being brought many miles by land, it became necessary to provide, if possible, some means of conveyance, which should obviate that evil. The Society therefore offered premiums for inventing fit carriages for that purpose, and some machines were produced, to which the premiums were adjudged ; these have not only answered the intent proposed, but

but have ever since served as models for carriages to transport glass and other things liable to be injured in their conveyance by rough treatment; and this is visible to every one who compares the light and easy vehicles now made use of, with those employed for the same purposes before the above-mentioned plan took place in London.

When the lease of the premises held by the Society, opposite Beaufort Buildings, in the Strand, was near expiring, it was judged expedient to engage with the Messrs. Adam, to erect a proper building in the Adelphi, for the use of the Society, and the accommodation of its officers. For this purpose, in the year 1771, articles were drawn for a lease of the premises, for a term of ninety-six years, at the annual rent of three hundred and thirty pounds; but on paying into the hands of Messrs. Adam the sum of one thousand pounds, it was agreed the rent should
be

be reduced to two hundred and seventy pounds per annum. In the year 1772, on more mature consideration, it was thought proper, at the request of Messrs. Adam, to pay to them the further sum of one thousand one hundred and seventy pounds ; which being done, they engaged to put the Society in possession of the building, to supply the premises with water, and pay all taxes, parliamentary and parochial, for the net rent of two hundred pounds per annum.

In June 1774, the leases having been duly executed, the Society took possession of the buildings they now occupy, and the before-mentioned engagements have hitherto been mutually fulfilled.

In the year 1777, a proposal was made, by Mr. Barry, at that time a member of the Royal Academy, and since elected professor of painting, to decorate the Great Room of the Society with Paintings, analogous to the views of its institution ;
which

which proposal being accepted, that ingenious artist has been ever since employed in perfecting the several pieces that are to compose the series of pictures designed to shew the progress of art, from the earliest accounts to the present æra.

A GENE-

(62)

A
GENERAL ABSTRACT
OF THE
REWARDS
GIVEN BY THE
SOCIETY,

From the first Institution, to the Year 1782, inclusive.

	£.	s.	d.	Medals.		Pallets.		
				Gold.	Silv.	Gold.	Silver	Small
Agriculture	3281	8		77	31			
Chemistry	1391	10		5	3			
Colonies & Trade	2785	13	8	14				
Manufactures . .	2057	11		1	4			
Mechanicks	2453	4	6	9	14			
Polite Arts	3595	0		25	26	23	68	53
Miscellaneous . .	6140	10	2	18				
				145	78	23	68	53
145 Gold Medals	1065	15						
78 Silver Medals	75	3						
23 Gold Pallets	216	4						
68 Great Silver } Pallets . . }	91	16						
53 Small Silver } Pallets . . }	58	6						
	28212	11	4					